

## ABSTRACT

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An activated carbon-metal oxide matrix is disclosed. The activated carbon-metal oxide matrix may by obtained by a method including the steps of: preoxidizing a carbon material, grinding the preoxidized carbon material; mixing the ground preoxidized material with a metal oxide to form a carbon mixture; extruding the carbon mixture; carbonizing and activating the extrudate. The activated carbon-metal oxide matrix may be used to remove odorous compounds, acidic gases, and volatile organic compounds from a gas.